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ABSTRACT

The general goal of the Michigan Educational Assessment Program is to provide citizens and educators with information regarding the quality and progress of the State's system of public education. The State Board of Education recently approved four objectives of the educational assessment effort which will move the program toward this general goal in 1970-71. These include the provision of state level public information, the provision of information to local school systems, to students and parents, and the provision of information regarding educational progress. A discussion of the rationale for their inclusion in the program is presented, together with the methodologies that will be used to fulfill them. Additionally, this report includes two sections designed to clarify certain aspects of the 1970-71 program. The second section--which uses a question-answer format--presents information regarding the substance of the program and information regarding certain of its specific procedures. The third section presents information regarding the work of the "Task Force on the Goals of Michigan Education." This task force has drafted a set of common educational goals for Michigan which have been modified and tentatively adopted by the State Board of Education for public discussion. (Author/PR)

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objectives and procedures

OF THE MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM

1970-71

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Assessment Report Number 7

MICHIGAN DEPARTMENT OF EDUCATION 1970

State Board of Education

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OBJECTIVES AND PROCEDURES OF THE 1970-71 MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM

Assessment Report No. 7

Prepared in the Bureau of Research, Evaluation, and Assessment

Michigan Department of Education

December, 1970

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FOREWORD

In August, 1969, the State Superintendent of Public Instruction introduced the initial thrust of the Michigan Educational Assessment Program emphasizing that:

> the full implementation of a meaningful assessment program will not be achieved in the period of one year. Nor will it be achieved without the cooperation and involvement of professional educators and lay citizens. The task at hand is a complex one and will necessitate systematic planning and development over a period of many months. The activities which will be undertaken during the 1969-70 school year represent only a beginning step in a long-range program designed to provide better and more comprehensive information concerning the level, distribution, and progress of education in the schools of our state.

That beginning step was taken in 1969-70. This report presents the 1970-71 objectives for the second year of the Michigan Educational Assessment Program.

It is appropriate that, in introducing this report, I mention three additional matters.

First, it is the State Board of Education's intent to publicly release local assessment results from the 1970-71 program. This will insure that public officials and others will have access to this data--although it is envisioned that it will be released to local superintendents prior to its general publication.

Second, it should be mentioned that 17.5 million dollars in State money was allocated to elementary schools in 1970-71 according to criteria of social deprivation and pupil performance from the 1969-70 educational assessment. That is, schools with concentrations of low-achieving and low socioeconomic status children--as determined by the 1969-70 educational assessment--were provided compensatory money to improve their instructional programs.

Finally, I should like to point out that the 1970-71 assessment plans have benefited from a great deal of involvement of local citizens and educators. Probably no major program operated by this Department has received more scrutiny and discussion than the educational assessment effort. This involvement accounts for the many improvements which, I believe, will result from administration of the 1970-71 Michigan Educational Assessment Program.

John W. Porter
Superintendent of
Public Instruction

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THE OBJECTIVES AND PROCEDURES OF THE 1970-71 MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM

Introduction

It is the general goal of the Michigan Educational Assessment Program to provide citizens and educators with information regarding the quality and progress of the State's system of public education. The State Board of Education recently approved four objectives of the educational assessment effort which will move the program toward this general goal in 1970-71.

It is the main purpose of this report to list these four objectives together with discussion of the rationale for their inclusion in the program and the methodologies that will be used to fulfill them. Additionally, this report includes two sections designed to clarify certain aspects of the 1970-71 program. The second section--which uses a question-answer format--presents information regarding the substance of the program and information regarding certain of its specific procedures. The third section presents information regarding the work of the "Task Force on the Goals of Michigan Education." This task force has drafted a set of common educational goals for Michigan which have been modified and tentatively adopted by the State Board of Education for public discussion.

SECTION I

Objectives of the 1970-71 Michigan Educational Assessment Program

The 1970-71 Michigan Educational Assessment Program will gather, analyze, and report three basic kinds of information descriptive of educational systems: (1) information regarding students' background characteristics; (2) information regarding school and school district educational resources (including data descriptive of finances, instructional staff, educational programs, and educational facilities) and (3) information regarding student/school performance (including data descriptive of attitudes, drop-out rate, and achievement in the basic skills).

This information will be gathered from three basic sources: (1) an anonymous pupil background and attitude questionnaire which will be administered to all fourth and seventh grade public school students; (2) records held in the Department of Education; and (3) a basic skills achievement battery that will be administered to all fourth and seventh grade public school students.

Two things should be initially noted regarding the 1970-71 basic skills achievement battery. First, the 1970-71 achievement battery will be reliable enough so that results from it will be reported for individual students (the 1969-70 achievement battery was <u>not</u> reliable enough for individual student reporting). Second, it should be noted that individual pupil achievement results will be scored in <u>two</u> ways: (1) in terms of the pupil's relation to other pupils who complete the battery and (2) in terms of whether or not the pupil performed to a minimally-defined level of mastery on the battery. These procedures are described in more detail in Section II.

The four objectives of the 1970-71 Michigan Educational Assessment Program are discussed below.

Providing State Level Public Information

Objective one. The Michigan Educational Assessment Program will provide members of the State Board of Education, the Executive Office, and the Legislature with information needed for allocating the State's educational resources in a manner best calculated to equalize and improve the quality of educational opportunities for all children in the State.

Rationale. The first report in the educational assessment series made the assumption that "the most important education-related problem facing the State--and indeed the nation--is the inequitable distribution of school district performance levels and their correlates."[1] Several studies have been conducted in Michigan that indicate that some school systems are able to provide their students with higher quality educational programs than other systems. For example, the 1967 Michigan School Finance Study, proposed by the State Board of Education and supported by the State Legislature, indicated that affluent school systems provide their students with more special classes, programs and curricula, more qualified instructional staffs, and better facilities than less affluent districts.[2] Guthrie, Kleindorfer, Levin, and Stout, in a 1969 study, found a positive relationship between the social status of children and the provision of school services that held in Michigan for school districts, individual schools, and individual students. They concluded that, in general, "High quality school services are provided to children from wealthy homes. Poor quality school services are provided to children from poor homes."[3]

Methodology. In order to meet the first objective of the educational

assessment program, answers to three basic questions will be sought. The questions and the tentative methodologies that will be used in answering them are presented below.

1. What is the level of basic skills achievement and of other educational assessment measures in Michigan and in Michigan's community and district types? Discussion of Michigan's community and district types is presented in Section II. The educational assessment will answer the first question by displaying summary data for each of Michigan's community and district types. Thus, it will be possible to understand differences on the educational measures between, say, metropolitan core cities and urban fringe areas. This information will be derived separately from district-level, school-level, and individual student data.

The 1970-71 educational assessment will also display information that will indicate the proportion of children who are able to perform at minimum levels of mastery in the basic skills. This information will be displayed for the State as a whole, for each of Michigan's community types, and for each of the district types.

2. Do school districts (or schools) that score in the upper (or middle, or lower) third of a ranking of Michigan districts (or schools) on composite achievement also score relatively high (or in the middle, or relatively low) on certain other assessment measures? The first question seeks to explore the level of educational assessment measures in Michigan and in Michigan's community and district types. It is the purpose of the second question to describe how certain measures are distributed in Michigan. The fundamental difference between the two questions is that the first seeks to determine the level of each educational assessment measure independently; the second seeks to determine the distribution of measures in terms of district (or

school) scores on achievement.

A tentative methodology for answering this question is as follows: (1) the average achievement scores of districts (or schools) in the top, middle, and bottom thirds of a distribution of Michigan districts (or schools) will be computed; (2) the average score on other assessment measures will be computed for those districts (or schools) falling into each third by achievement; and (3) the scores will be graphically portrayed in tabular form.

It is planned that similar distributions will be made in terms of district (or school) scores on socioeconomic status. This will make it possible to understand, for example, whether or not those Michigan districts that score relatively high on socioeconomic status score--on the average--relatively high on basic skills achievement.

3. What is the level of basic skills achievement and of other educational assessment measures in each of Michigan's school districts? It is planned that local district assessment results will be publicly reported in 1970-71. Most of the educational measures will be reported in two ways in this report. First, a score will be reported for each measure in "raw" form. For example, the per cent of teachers with masters degrees, the average years of teaching experience, the pupil-teacher ratio, the K-12 instructional expense per pupil (in dollars), and the average score of students on reading will be reported. Second, these scores will be reported in terms of their position on a percentile distribution of Michigan school districts. The three basic skills parts of the achievement battery will also be reported in terms of the per cent of students in the district who are at or above a defined level of mastery.

Information to answer the above three questions will provide the State with valuable information regarding the level, distribution, and equality of

educational programs and student performance in Michigan. This information will be useful as deliberations are held regarding the allocation of State resources and the design of educational programs.

Providing Information to Local School Systems

Objective two. The Michigan Educational Assessment Program will provide citizens and educators in every school system with basic information regarding their district and its schools. This information will assist them in making local decisions regarding the allocation of resources and the design of educational programs.

Rationale. As was indicated above, several studies have shown differences in educational offerings among the State's school districts. Those studies--and others--have also shown disparities in educational program offerings within school districts. For example, Sexton in her study of a large Michigan city, provided evidence of significant class-related differences in the quality of educational programs among schools.[4]

Data from large-scale educational assessment efforts are also useful in the improvement of all aspects of educational curricula. For example, assessment information can identify strengths and weaknesses in certain areas of school performance.

Methodology. It is planned that local educators will be provided with assessment information and explanatory materials from the 1970-71 educational assessment. Two basic kinds of explanatory materials will be provided: (1) norm tables that may be used to display local assessment data and (2) information that explains the meaning of the assessment measures, their limits, and their uses.

The educational assessment materials may be used to answer two questions

at the local level. These questions and tentative methodologies to answer them are presented below. Also discussed is an experimental program whereby a group of Michigan districts are working with new ways to use educational assessment data.

1. What is the level of basic skills achievement and of other educational assessment measures in the school district in relation to other districts? Local educators may answer this question by displaying data for their school district on norm tables that will be provided together with 1970-71 educational assessment results. They will also be able to report on the number and per cent of children who are able--or who are not able--to perform at a minimal level of mastery on each portion of the basic skills battery.

2. What is the level of basic skills achievement and of other educational assessment measures in each school of the school district? Local educators may answer this question by displaying data for each school of their district. Again, norm tables will be provided for this purpose together with 1970-71 educational assessment results. Educators will also be able to report on the number and per cent of children who are able--or who are not able--to perform at a minimal level of mastery on each portion of the basic skills battery. This data should clearly indicate which schools within a district have most need for additional educational resources and improved educational programs.

As was mentioned above, the Department of Education is presently working with several local districts in the development of an accreditation-evaluation self-appraisal system. There are three essentials to this experimental program. First, it requires data regarding the local district and its schools. Most of this data, of course, is available from the educational assessment program--however, most school districts have additional useful educational

data regarding their students and schools. Second, it requires a Community Planning Committee composed of both educators and citizens. Third, the program requires that the Committee use educational data to ascertain how well the district is meeting educational goals that have been set by the Committee.

This proposed program was summarized in a recent memorandum accepted by the State Board of Education: "Utilizing the systems-analysis approach, the Community Planning Committee will . . . establish desirable outcomes which will . . . be evaluated in terms of . . . pre-selected indicators to determine whether the system is attaining the school system's self-established goals. Each performance objective will be re-evaluated each year to determine where the district rates on an accreditation-evaluation self-appraisal scale."[5]

Providing Information to Students and Parents

Objective three. The Michigan Educational Assessment Program will provide school districts with basic information regarding students that will help the students, their parents, and educators to assess their progress. Additionally this information will be used by districts to identify students who have extraordinary need for assistance to improve their competence in the basic skills.

Rationale. Professional educators are assisted in their work by information regarding the achievement levels of individual children. This information allows them to design individually appropriate learning experiences for children. The information is particularly useful in identifying students who have unusual need for remedial educational assistance. Therefore, most districts contract with test publishers to periodically assess the achievement of their students.

Act number thirty-eight of the Public Acts of 1970 states that the

Michigan Educational Assessment Program shall identify students "who have extraordinary need for assistance to improve their competence in the basic skills." It further states that the Department of Education "shall provide remedial assistance programs, as funds are made available by law to school districts to raise competencies in basic skills of students identified (in the above statement)."

Methodology. Local educators will be able to answer one question regarding each student who completes the basic skills achievement battery.

1. What is the level of educational attainment in the basic skills of each child who completes the basic skills achievement battery? As was mentioned above--and is explained more fully in Section II--individual achievement results will be scored and reported in two ways: (1) in terms of the pupil's relation to other pupils who complete the battery and (2) in terms of whether or not the pupil performed to a minimally defined level of mastery on each section of the battery.

Most schools will have a number of students who are not able to read, write, and/or perform arithmetical operations at desired levels. It is probable that these children will not be able to fully participate in American society without an understanding of basic skills. Therefore, all local district officials must seek an answer to a most important question: What can be done to insure that every child who attends school reaches an acceptable mastery of the basic skills? The mere asking of this question will not by itself insure that all children will learn how to read, write, and compute. Nor can it be expected that the State Board of Education can answer the question for a local school district. Each local district must decide for itself how it can best allocate its educational resources and design its educational programs so that all regular students are prepared for

participation in American society.

Providing Information Regarding the Progress of Education

Objective four. The Michigan Educational Assessment Program will provide citizens, the State Board of Education, the Executive Office, and the Legislature with information regarding the progress of the Michigan educational system as a whole, the progress of its school districts, and the progress of its schools over a period of years.

Rationale. As was stated above, a most important question facing the State--and local school districts--is the equalization and improvement of educational programs and student performance. By conducting an annual educational assessment it will be possible to measure the degree to which equalization and improvement are actually taking place.

Methodology. In order to facilitate comparisons over time, parts of future educational assessment batteries will be similar to the one administered in 1969-70. Additionally, many of the measures descriptive of educational resources will be similar or identical on an annual basis.

Two basic questions will be used as a guide to the fourth objective. These questions and tentative methodologies to answer them are provided below.

1. Is the level and distribution of basic skills achievement and of other educational assessment measures improving over time among the State's school districts? This question is concerned with both the level and distribution of educational assessment measures. It will be possible to ascertain improvement in the level of basic skills performance by comparing the per cent of children who are able to perform at desired levels of mastery in the basic skills over time. It will be possible to ascertain improvement in the distribution of educational assessment measures by comparing scores of

high and low districts over time. That is, it will be possible, for example, to ascertain whether or not low achieving districts are improving their position relative to other districts over time.

2. Is the level and distribution of basic skills achievement and of other educational assessment measures improving over time within the State's school districts? The above question is concerned with the State-wide level and distribution of educational assessment measures. This question is also concerned with the quality and equity of educational opportunities--but at the local level. Hence each district will be able to tell how much its educational program is improving over time by comparing the assessment results from its schools on an annual basis.

SECTION II

Clarification of Selected Aspects of the 1970-71 Educational Assessment

During the late summer and autumn of 1970, a number of meetings regarding educational assessment were held with interested and knowledgeable persons. A primary purpose of these meetings was to improve the Michigan Educational Assessment Program. For example, seven regional educational assessment meetings were conducted during the summer--in part to obtain reaction to the 1969-70 educational assessment effort and in part to gather suggestions for improving the 1970-71 effort. These meetings were hosted by intermediate school district superintendents in Flint, Grandville, Marquette, Mason, Pontiac, Portage, and Traverse City and were attended by an estimated one-thousand people.

Four invitational meetings were held in the autumn for the specific purpose of considering improvements in the 1970-71 program: an all day meeting of nationally-recognized experts in measurement and evaluation; two half-day meetings with selected staff of the Department of Education; and a half-day meeting with approximately twenty Michigan educators.

Additionally, five panels of educators were convened to consider various aspects of the 1970-71 educational assessment battery. Separate panels reviewed the reading, mechanics of written English, mathematics, and socioeconomic background portions of the battery. A final panel reviewed a second draft of the entire achievement battery.

It should also be mentioned that staff of the Department's Research, Evaluation, and Assessment Services have visited some twenty-five local

school systems (as of late November) and have been invited to speak to a number of groups and organizations regarding educational assessment in Michigan. Groups that have requested speakers include associations of school board members, principals, teachers, and directors of curriculum.

Finally, staff have discussed the educational assessment program with members of the State Board of Education, interested legislators, and representatives of the Governor's office on several occasions.

As a result of these meetings, a number of changes have been made in the Michigan Educational Assessment Program. It is the purpose of this section to clarify and expand upon the assessment objectives listed above--and thereby indicate a number of improvements in the 1970-71 educational assessment.

The section has two parts. The first clarifies substantive issues raised by the program and the second clarifies procedural issues. The format for this section is question-answer.

Major Substantive Issues

Eight important questions regarding the substance of the 1970-71 Michigan Educational Assessment Program are answered below.

1. What are the major changes in substance between the 1969-70 and 1970-71 administrations of the Michigan Educational Assessment Program? There are three major changes in this year's version of the educational assessment effort. First, as may be seen above, this year's objectives are spelled out in greater detail than they were a year ago. The objectives of the 1969-70 program were similar to those proposed for the current year; however, over the past twelve months, the program's objectives have been much more clearly spelled out as the program has received considerable

discussion from citizens and educators.

Second, the basic skills portion of the 1970-71 educational assessment battery will be sufficiently reliable to allow reporting of individual children's scores at grades four and seven. This means that it will be possible to report to the local school district the results for each child who completes the battery. (Note that the student background portion of the battery will be given separately--and anonymously. Students will not be identified on this portion of the battery.) Both the educational assessment battery and the manner in which the individual results will be reported are described later in the report.

Third, the program will be expanded in the current year to include a number of additional measures. Several new school resource measures will be included; several of them will reflect school programs and facilities. These measures will be gathered--at the school level--as part of the Department's regular 1970-71 data collection procedures. Additionally, several new student/school performance measures, as shown in Figure 1, will be used including attitude measures and a district measure of dropout rate. The latter measure will be compiled from the Department's annual dropout study.

2. What measures will be used in the 1970-71 program and how will they be classified? Three main types of measures will be compiled and analyzed in 1970-71: student background measures; school resource measures; and student/school performance measures. Most of the measures will be compiled and analyzed at the school level. A tentative list of the 1970-71 educational assessment measures is presented in Figure 1.

Figure 1

TENTATIVE MEASURES TO BE USED IN THE 1970–71 ASSESSMENT

STUDENT BACKGROUND

STUDENT SOCIOECONOMIC BACKGROUND

1. Students' estimate of socioeconomic status □

STUDENT RACIAL BACKGROUND

2. Per cent of white students □⊕

SCHOOL RESOURCES

HUMAN RESOURCES

3. Pupil-professional instructional staff ratio □⊕
4. Pupil-teacher ratio □⊕
5. Per cent of teachers with five or more year experience □⊕
6. Average years teaching experience (1969–70) *⊕
7. Per cent of teachers with Masters degree □⊕
8. Per cent of teachers earning $11,000 or more □⊕
9. Average salary of teachers (1969–70) *⊕

SCHOOL FINANCIAL RESOURCES

10. State equalized valuation per resident pupil (1969–70) *⊕
11. Local revenue per pupil (1969–70) *⊕
12. State school aid per pupil (1969–70) *⊕
13. K-12 instructional expense per pupil (1969–70) *⊕
14. Total current operating expense per pupil (1969–70) □⊕

SCHOOL PROGRAM RESOURCES

15. Number of innovative organizational practices □⊕
16. Number of special services available □⊕

SCHOOL FACILITIES RESOURCES

17. Number of innovative facilities □⊕

SCHOOL/STUDENT PERFORMANCE

PERFORMANCE ON ATTITUDE MEASURES

18. Importance of school achievement
19. Self perception
20. Attitude toward school

PERFORMANCE ON DROPOUT RATE

21. School dropout rate (1968–69) *□⊕

PERFORMANCE ON BASIC SKILLS MEASURES

22. Vocabulary
23. Reading
24. Mechanics of written English
25. Mathematics
26. Basic skills composite achievement

* These measures are available at the district level only.

□ These measures are either new or have been substantially changed from corresponding measures used in 1969–70.

⊕ These measures are held in Department records. It is planned that a computer printout will be sent to each district in January. The printout will include the district's score on each measure. District officials will then be able to check the data for accuracy before it is combined with data to be collected with the educational assessment battery.

3. What will be the content of the basic skills portion of the 1970-71 educational assessment battery and how will the basic skills portion of the battery be scored for individual pupils? The 1970-71 educational assessment battery was constructed by Educational Testing Service from specifications which were drafted by the Department of Education. In drafting these specifications, the Department considered the legislation which created the program and the comments of numerous citizens and educators.

The tests were constructed to reflect the specifications as closely as possible, within certain inescapable time limits and within the limits of the current state of the art of test construction. A draft of each basic skills test was reviewed by a panel of teachers and subject matter specialists and by a final review panel which considered the entire battery.

The basic skills portion of the battery includes four sections, each similar in content to the corresponding section used in 1969-70:

Vocabulary: The vocabulary portion of the educational assessment battery measures knowledge of meanings of words and understanding of relationships among words and concepts. This is accomplished through use of verbal analogy items.

Reading: The reading portion of the educational assessment battery measures the ability to read. This is accomplished through use of questions regarding paragraph comprehension, questions regarding understanding of words in various contexts, and questions regarding knowledge of synonyms.

Mechanics of written English: This portion of the battery measures knowledge of written English. This is accomplished through use of questions regarding spelling, expression, written usage, word choice, capitalization, and punctuation. The corresponding section in the 1969-70 battery was

called English expression.

Mathematics: The mathematics portion of the battery measures mathematics achievement. This is accomplished through questions regarding mathematical reasoning and problem solving in arithmetic (fourth and seventh grades) and algebra and geometry (seventh grade).

As was mentioned above, it is planned that the Department of Education will report to the local superintendent of schools individual results from the basic skills portion of the battery. It is planned that these results will be scored so that they may be interpreted in two ways.

First, it is planned that results will be reported so that it will be possible to know where each student stands in relation to other students on each part of the test. That is, it will be possible to know, say, that a pupil's score is at the sixtieth percentile on a State-wide distribution of reading scores. This kind of reporting will be useful in those districts where most pupils are above minimally-defined levels on each portion of the basic skills battery. This procedure will be similar to the one used for reporting results of schools and districts in 1969-70.

Second, it is planned that results will be reported in terms of whether or not the student can perform at a defined minimal level for his grade. That is, it will be possible to know that a pupil can, say, read at a defined minimal level for fourth grade. It is planned that the minimal level for each portion of the basic skills battery will be cooperatively developed by representative panels of Michigan fourth and seventh grade teachers and subject-matter specialists. In short, results of this type will be useful to the student, his parents, and his teacher because they will convey whether or not the student needs additional help in the basic

skills.

4. Why are measures of students' socioeconomic background sought by the assessment program? Socioeconomic status (SES) is an extremely difficult concept to define--in fact no single definition of it will suit everyone. Additionally, once it has been defined, however arbitrarily, it is difficult to accurately measure and index.

Despite these difficulties, the 1970-71 assessment program will again estimate the socioeconomic status of schools and districts. There are two reasons for continuing to estimate socioeconomic status. First, many studies--most notably, the so-called Coleman Report[6]--have shown a high relationship between student background characteristics and student achievement. Second, a number of studies have shown a strong relationship between student background characteristics and the financial levels at which schools are supported. These studies have also shown a relationship between SES and the qualities of instructional staffs.[7] In short, students' socioeconomic status is thought to have a powerful influence on both achievement and on school characteristics. Therefore, it is included as one type of assessment measure.

5. What are the methods of obtaining SES data and what method will be used in the 1970-71 educational assessment? Students' socioeconomic status is often thought to be a function of three major factors: (1) family income; (2) parents' education level; and (3) parents' occupation. Additionally, such factors as (4) housing quality and crowdedness; (5) family structure and stability; and (6) population density are thought to be indicators of SES.[8]

Below are discussed four methods of estimating the social and economic backgrounds of students. Despite limitations in each of the four methods the 1970-71 educational assessment will use the second of the methods in its analyses and reports. SES data will also be gathered by way of the third and fourth methods in order that the Department of Education may conduct research into the validity of the SES measure that is publicly reported.

(1) The first method of obtaining SES data is through parent interviews. This method results in the most accurate portrayal of SES because it is possible to ask parents direct questions about their status in terms of the factors listed above. However, this method is also prohibitively expensive because of the great number of parents that would have to be interviewed.

(2) The second method of obtaining SES data is through student estimates. This method has been shown to be reasonably valid--particularly for groups of children--and is inexpensive. The method is limited in that some children --particularly young children--do not know important things about their families, including income and occupation. Therefore, the method must ask for indirect estimates of background factors.

This method was used in the 1969-70 educational assessment effort. Despite concerns regarding the validity of the 1969-70 SES measure in some schools, this method will again be used in the 1970-71 educational assessment. However, four improvements have been made in the 1970-71 pupil background questionnaire as follows.

First, all 1970-71 SES information will be collected anonymously. A separate answer sheet will be provided for recording responses to the SES questions--and only the child's school will be identified. Anonymity

is expected to encourage more honest responses and eliminate parents' objections regarding the invasion of privacy.

Second, the number of items in the SES portion of the battery has been increased for 1970-71. Testing specialists have demonstrated that test reliability can be improved by increasing test length. Therefore, the 1970-71 SES measure will be more reliable than it was in 1969-70.

Third, items which did not appear to differentiate the status of children in 1969-70 have been removed from the 1970-71 battery. For example, a question regarding ownership of vacuum cleaners on the 1969-70 battery was answered positively by ninety-four per cent of the children who responded. Hence, it did not discriminate well between students of high, middle, and low SES and has therefore been dropped.

Fourth, in order that the program might benefit and learn from criticism leveled at the 1969-70 SES measure, staff of the Department of Education, public school personnel, and parents were asked to review the SES questions before they were printed. Thus, the 1970-71 SES measure reflects the thinking of a variety of educators and citizens.

(3) The third method of obtaining SES data is through <u>educator estimates</u> of students' characteristics. This method is not thought to be as good as the one discussed above because educators must attempt to estimate the backgrounds of groups of children--and they are often not fully aware of the background of each child in the group. However, principals of schools will be asked to estimate the status of their students on a number of factors in the 1970-71 educational assessment. These estimates will not be reported publicly; however, they will provide a check on the validity of the student-derived SES measures.

(4) The fourth method of obtaining SES data is through the use of census-type data such as that collected every ten years by the U. S. census, by that collected by welfare agencies, and so forth. This data is often thought to provide the best possible estimate of students' backgrounds. However, there are three serious limitations to this data: (1) they are often old (the most recent available U. S. census data is over ten years old); (2) they are often collected on a city or county basis--and these political units are often not coterminous with school and district boundaries; and (3) these data are often not a good estimate of the SES of public school children--particularly in areas where a great many children attend non-public schools.

The Department of Education has in its records a census-type measure of SES. This measure--which is used to allocate monies under Title I of the Federal Elementary and Secondary Education Act--is a composite made up from: (1) the per cent of children from low-income (less than $2,000 per year) families according to the 1960 census; (2) per cent of children from families receiving more than $2,000 per year in Aid for Dependent Children; (3) number of children residing in foster homes; and (4) number of children residing in homes for the neglected or delinquent. These data will also be used in research to determine the validity of data obtained from children; however, they will not be publicly reported both because of their age and because they are available at only the school district (not the school) level.

To summarize, socioeconomic status data for use in the 1970-71 educational assessment will be obtained through use of an improved questionnaire to be administered to students. Additionally, SES data will be gathered

from principals and from records held in the Department of Education. This data will be used to study the validity of the SES estimates obtained from children.

6. Why are the fourth and seventh grades being assessed? Ideally, the State's citizens and educators should have information descriptive of the performance of the educational system as children enter it, as they proceed through it, and as they complete it. However, monetary and time constraints preclude an assessment effort that considers all the grade levels. It may be noted that the fourth and seventh grades were assessed in 1969-70; hence, choosing them again makes possible comparisons between the two years.

The fourth grade was selected for educational assessment because students should have learned the basic skills well enough to be tested about them with paper-pencil tests. At the earlier grade levels, it is difficult and extremely expensive to administer basic skills tests to children. Likewise, it is generally accepted that the primary cycle of education covers grades one, two, and three.

The seventh grade was selected because the complicating effects of school dropouts do not enter the picture to a significant degree, and because it is thought that formal instruction in the basic skills is essentially completed at the end of the elementary cycle or sixth grade.

7. Why are the State's school districts classified by community type and district size, and what are the criteria used for classification? In 1969-70, the State's districts were classified into four regions and five community types in order to facilitate comparisons between certain groups of districts. It is planned that districts will again be classified

according to community type in 1970-71--however, these classifications are still being reviewed. Additionally, it is planned that assessment results will be reported according to district population in 1970-71.

There will be no publicly-reported regional breakdowns in 1970-71 as these were not seen as being valid comparisons in 1969-70. This was because certain types of districts in some regions tended to influence scores greatly. However, data will be publicly available for each district; therefore, it will be possible for local officials to make their own regional comparisons if they wish to do so.

8. How--and when--will results from the 1970-71 educational assessment be reported? Reporting of results from the 1969-70 educational assessment was delayed because of two serious mechanical problems. First, there was a great deal of difficulty in matching data collected from schools and districts with the educational assessment battery to other data available in the Department of Education. Second, there were a number of problems involved in getting assessment reports printed once they had been written. These problems have been given serious consideration, and it is anticipated that results from the 1970-71 educational assessment will be available much sooner than they were in 1969-70.

As is indicated in the first section of this paper, three general types of data will be reported in 1970-71; (1) data regarding large groups of districts, schools, and students; (2) data regarding individual districts and schools; and (3) data regarding the educational achievement of individual students. It is planned that the data regarding individual students will be reported first; that data regarding individual districts and schools will be reported second; and that data regarding groups of

districts, schools, and students will be reported last. A tentative timetable for reporting is provided in Figure 2.

Major Procedural Issues

Ten important questions regarding the procedures of the 1970-71 Michigan Educational Assessment Program are answered below.

1. What are the major procedural changes between the 1969-70 and 1970-71 administrations of the Michigan Educational Assessment Program? The 1969-70 assessment program was--of necessity--designed and executed in a very brief time. Consequently, it was difficult to involve educators and citizens in its design and procedures. However, the 1970-71 effort has --as is pointed out in the introduction to this part of the report--benefited from a great deal of involvement. This procedure of involving others will continue.

2. Who will conduct the 1970-71 program? The 1970-71 program will be conducted by the Research, Evaluation, and Assessment Service, Michigan Department of Education with the assistance of Educational Testing Service, Princeton, N. J.

3. Will all Michigan districts be included in the 1970-71 program? Yes. All public school districts with pupils in grades four and/or seven will be included in the 1970-71 program. It is not presently the intention of the State Board of Education to assess the State's nonpublic schools. Testing nonpublic schools appears impossible in light of a recently-passed amendment to the Michigan Constitution which bans certain types of public assistance to these schools.

FIGURE 2

Tentative Timetable 1970-71

Michigan Educational Assessment Program

Date	Event
February 5, 1971	Completion of administration of educational assessment battery in Michigan schools (including makeup administrations).
April 1, 1971	Release to local districts of individual student results on basic skills achievement portion of basic skills battery (includes each child's score, norm tables, and technical information regarding achievement battery and interpretation of scores).
April 15, 1971	Release to local districts of school district and school results on all measures used in the 1970-71 educational assessment (includes district and school scores on all measures, norm tables, and explanatory materials).
June 15, 1971	Reporting of public results for groups of Michigan districts, schools, and pupils (includes separate reports for each of the three questions listed under this report's first objective).

4. Which fourth and seventh graders will--and will not--be given the 1970-71 educational assessment battery? Most fourth and seventh graders will take the assessment battery. Questions which have been raised regarding several specific groups of students are discussed below.

Students receiving itinerant services (e.g., hard of hearing, physically handicapped, educable mentally retarded, emotionally disturbed, and those with speech impediments) in addition to instruction in the regular class program in the areas of reading, English, and mathematics will take the assessment battery.

Students in non-graded programs who are identifiable as fourth or seventh graders will take the assessment battery. Students whose grade level cannot be determined should be included if they are in their fourth or seventh year beyond kindergarten.

At the present time it is unclear as to whether or not public schools can accept pupils from nonpublic schools on a shared time basis. However, if there are such pupils in the public schools such students will take the assessment battery if they are in public schools for instruction in the basic skills. If only certain basic skills are taken in public schools, the student may (a) take only those aspects of the battery for which he/she receives public school instruction or (b) at the option of the local district, be excluded from taking the battery.

Students currently assigned to and receiving instruction in special classes for the handicapped in the areas of reading, English and mathematics will not take the assessment battery. (It may be noted, however, that the Special Education Services of the Department of Education is currently studying ways in which such students' performance may be measured.)

5. How long will it take to administer the assessment battery? The basic skills and vocabulary portions of the battery is estimated to take approximately 115 minutes of actual working time for completion. It is estimated that the student background portion of the battery will take about thirty minutes to complete. It is therefore recommended that the battery be administered in three sessions as outlined in the Examiner's Manual which will be provided with the assessment materials.

6. What steps are being taken to assure some degree of statewide standardization in administration? The superintendent in each K-12 school district has been asked to designate a local district coordinator. It will be the responsibility of local district coordinator to: (a) receive the materials; (b) distribute them to buildings; (c) train the test administrators; (d) collect the used and unused materials (both the answer sheets and the booklets); (e) destroy the used and unused booklets and unused answer sheets to protect the security of the test content; and (f) prepare for return to Educational Testing Service the used answer sheets, school coordinators reports, and local district coordinator reports requested in the Examiner's Manual. In addition, the coordinator will answer (or relay to the Department of Education) questions that arise in his district concerning the program, the materials, or their intended use. Finally, he will certify to the Department of Education that he has personally supervised (or performed) the destruction of the designated materials.

In non-K-12 districts, the function of the local district coordinator will, in general, be performed by a coordinator designated by the intermediate district superintendent. An intermediate district contact person has been appointed in each of the fifty-nine intermediate districts in

the state. These persons in intermediate districts which serve non-K-12 local districts will serve in a capacity similar to that of a local district coordinator in the K-12 districts.

Three manuals have been written to assist these individuals concerned with the assessment program: (a) the Local District Coordinators' Manual; (b) the School Coordinators' Manual; and (c) the Examiner's Manual. The procedures outlined in these manuals attempt to insure statewide standardization in the administration of the assessment battery.

7. Who will administer the educational assessment battery? The educational assessment battery will be administered by the classroom teacher in most typical fourth grade settings. In the seventh grade, the battery may be administered in classrooms by teachers (with periods extended to accommodate the length of the testing period) or the test may be administered by a principal or counselor to a large group assembled in a cafeteria, library, or (if adequate lighting and work surface are present) in an auditorium.

The persons chosen to administer the battery will be selected and notified well in advance of the administration date and will be supplied with the necessary materials and trained in their use.

In 1969-70, time and staff constraints precluded the monitering of local administrations of the educational assessment battery. However, it is planned that a sample of school districts will be carefully monitored in 1970-71 so as to assist district officials and increase uniformity in administration. These monitors will be staff members of the Department of Education.

8. When will the assessment battery be administered? The last two full weeks in January have been designated for administering the battery, i.e., January 18-29, 1971, inclusive. The directions for administering the battery have been written on the assumption that the battery will be given in three sessions.

While few limitations are imposed on the scheduling of the battery within the designated period, two considerations should be borne in mind. First, by scheduling the battery early in the two-week period, time will be left to hold a make-up administration for any who missed one of the regular administrations. Second, it is generally believed that pupil performance on achievement batteries is adversely affected by such things as "Monday morning stupor" and "Friday afternoon itch." To the extent that these conditions can be predicted, it seems wise to schedule the battery to avoid them. Many districts will find that the mornings of January 19, 20, and 21 will be the best times to schedule the regular administration, with the make-ups being held the corresponding mornings of the following week. But each district will need to review its own calendar to determine the best time for its own pupils. Districts with irresolvable time conflicts should notify staff of the Educational Assessment Program, Department of Education (tel.: 517--373-1830) so that alternate dates may be worked out.

9. How will quantities of assessment materials needed and shipping methods be determined? An order for materials will be sent to each district for completion. Each local district coordinator will be asked to: (a) furnish a correct address to be used for shipment of materials; (b) confirm

the accuracy of the names of schools that will be testing fourth or seventh grade pupils; (c) report any delivery problems encountered last year; and (d) indicate the numbers of fourth and seventh grade pupils in each school.

10. When will the assessment materials be mailed and to whom? To whom should they be returned? In all K-12 districts, the assessment battery and accessory materials will be shipped between December 21, 1970 and January 5, 1971 by Educational Testing Service to a local district coordinator who has been designated by the school superintendent.

In non K-12 districts, the materials will be sent by Educational Testing Service to the appropriate intermediate district contact person who will perform the functions of the local district coordinator for the non K-12 districts in the intermediate district. In a few of the larger non K-12 districts, a local district coordinator has been designated who will receive materials directly from Educational Testing Service.

A school coordinator for each school within the district will need to be appointed by each local district coordinator. The school coordinator is responsible for all materials supplied to him by the local district coordinator.

After the administration, the educational assessment batteries and answer sheets, both used and unused, are to be returned to the local district or intermediate district coordinator from whom they were secured. That coordinator will be responsible for all materials supplied to him.

SECTION III

A Note on the Common Goals of Michigan Education

When the Michigan Educational Assessment Program was conceived and designed it was planned as a two-pronged effort. First, it was planned that initial educational assessment efforts would measure the performance of schools/students in terms of a generally agreed upon goal of education: achievement in the basic skills. However, it was also planned that other common goals of Michigan's educational system would be defined and measured as the program matured.

Accordingly, the State Board of Education appointed an advisory Task Force on the Goals of Michigan Education in early 1970. This task force included some twenty people who were broadly representative of Michigan's citizens, educators, and students. The task force was given the responsibility of drafting a statement of the common goals of Michigan education.

The task force convened several times during the spring and early summer of 1970. Then, in July, it presented a draft of "The Common Goals of Michigan Education" to the State Board of Education. Members of the Board--after considerable debate and deliberation--modified the document somewhat. They then instructed staff of the Department of Education to publish and distribute the document so that it could be widely read and discussed.

As of this writing 25,000 copies of the goals statement are being widely distributed to Michigan's citizens and educators. It is planned that the goals will be discussed at a series of public meetings throughout the State. At the conclusion of the meetings, members of the State Board will--after considering the comments and suggestions of the State's citizens--adopt the goals

as being common to the State's schools.

After the goals have been adopted, it is planned that they will be operationally defined. They will then be included--as time constraints permit--into future administrations of the educational assessment program.

SECTION IV

Summary

This paper has outlined the four basic objectives of the 1970-71 Michigan Educational Assessment Program. Additionally, it has attempted to clarify certain aspects of the program. And finally, it has provided a brief account of the work of the Task Force on the Goals of Michigan Education.

It has, in recent years, become increasingly evident to members of the State Board of Education, to the Executive Office, to legislators, to local school officials, and to the general public that reliable information concerning the level, distribution, and progress of the State's educational system is scarce. The 1969-70 assessment effort made a start toward providing information of this type. The 1970-71 program will hopefully provide more. This information can provide a rationale for the design of improved educational programs and for the allocation of educational resources--and thereby assist in providing Michigan's children with improved and more equitable educational opportunities.

Footnotes

[1]Purposes and Procedures of the Michigan Assessment of Education (Lansing, Mich.: Michigan Department of Education, 1970), 2.

[2]J. Alan Thomas, School Finance and Educational Opportunity in Michigan (Lansing, Mich.: Michigan Department of Education, 1968).

[3]James W. Guthrie and others, Schools and Inequality: A Study of Social Status, School Services, Student Performance and Post-School Opportunity in Michigan (No publication place: The Urban Coalition, 1969), 91.

[4]Patricia Cayo Sexton, Education and Income: Inequalities in Our Public Schools (New York: Viking Press, 1964).

[5]John W. Porter, "State Department of Education Involvement in School Accreditation in Michigan" (Lansing, Mich.: Memorandum presented to the Michigan Board of Education, June 2, 1970), 4-5.

[6]James S. Coleman and others, Equality of Educational Opportunity (Washington, D.C.: U. S. Government Printing Office, 1966).

[7]For reviews of literature in this area see: James W. Guthrie, "A Survey of School Effectiveness Studies," Do Teachers Make a Difference? (Washington, D. C.: U. S. Government Printing Office, 1970); Elsa Rosenthal, A Survey of Attempts to Measure the Performance of Educational Systems (Princeton, N. J.: Educational Testing Service, 1968); and Thomas P. Wilbur, Research into the Correlates of School Performance: A Review and Summary of Literature (Lansing, Mich.: Michigan Department of Education, 1970).

[8]For an excellent recent discussion of the concept of socio-economic status and its relation to achievement see: Arvid J. Burke, James A. Kelly, and Walter I. Garms, Educational Programs for the Culturally Deprived: Need and Cost Differentials (Albany, N.Y.: State University of New York, 1970), B-1-B-33.